

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: September 12, 2001, 11:52:51 ; Search time 12.26 Seconds  
(without alignments)  
429.945 Million cell updates/sec

Title: US-08-012-269A-2  
Perfect score: 1428  
Sequence: 1 MGNVCNVVVIVLLVGCCK.....DACSCRCPEBEGGGGVEL 256

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 197339 seqs, 20590346 residues

Total number of hits satisfying chosen parameters: 197339

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.\*  
1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep.\*  
2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep.\*  
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6: /cgn2\_6/ptodata/2/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1428	100.0	256	1 US-08-236-918A-6	Sequence 6, Appli
2	1428	100.0	256	5 PCT-US96-03965-2	Sequence 2, Appli
3	1085	76.0	191	3 US-08-974-022-52	Sequence 52, Appl
4	795	55.7	255	1 US-08-236-918A-8	Sequence 8, Appli
5	795	55.7	255	2 US-08-816-605-9	Sequence 9, Appli
6	795	55.7	255	5 PCT-US96-03965-8	Sequence 8, Appli
7	656	45.9	219	2 US-08-816-605-2	Sequence 2, Appli
8	215	15.1	625	3 US-08-996-139-15	Sequence 15, Appl
9	215	15.1	625	4 US-08-995-659-15	Sequence 15, Appl
10	208.5	14.6	276	4 US-09-041-886-27	Sequence 27, Appl
11	208.5	14.6	277	4 US-09-042-785A-10	Sequence 10, Appl
12	205.5	14.4	451	3 US-08-996-139-4	Sequence 4, Appli
13	205.5	14.4	451	4 US-08-995-659-4	Sequence 4, Appli
14	205.5	14.4	591	3 US-08-996-139-2	Sequence 2, Appli
15	205.5	14.4	591	4 US-08-995-659-2	Sequence 2, Appli
16	205.5	14.4	616	3 US-08-996-139-6	Sequence 6, Appli
17	205.5	14.4	616	4 US-08-995-659-6	Sequence 6, Appli
18	203.5	14.3	228	3 US-08-911-423-2	Sequence 2, Appli
19	202.5	14.2	277	4 US-08-147-784-2	Sequence 2, Appli
20	202.5	14.2	277	4 US-08-195-967-2	Sequence 2, Appli
21	201.5	14.1	228	3 US-08-911-423-6	Sequence 6, Appli
22	200	14.0	461	4 US-09-042-785A-7	Sequence 7, Appli
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24	197	13.8	461	1 US-08-385-229-2	Sequence 2, Appli
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26	197	13.8	461	4 US-08-477-347-3	Sequence 3, Appli
27	197	13.8	461	6 5395760-2	Patent No. 5395760

28	188	13.2	401	3	US-08-974-022-6	Sequence 6, Appli
29	188	13.2	401	4	US-09-042-785A-12	Sequence 12, Appl
30	186.5	13.1	289	4	US-09-042-785A-11	Sequence 11, Appl
31	185	13.0	300	2	US-08-794-796-2	Sequence 2, Appli
32	185	13.0	474	2	US-08-650-000-4	Sequence 4, Appli
33	185	13.0	474	4	US-09-042-785A-8	Sequence 8, Appli
34	185	13.0	474	6	5395760-4	Patent No. 5395760
35	184	12.9	227	3	US-08-974-022-48	Sequence 48, Appl
36	183	12.8	486	1	US-08-243-010-1	Sequence 1, Appli
37	181	12.7	197	3	US-08-974-022-49	Sequence 49, Appl
38	181	12.7	518	1	US-08-385-229-4	Sequence 4, Appli
39	180.5	12.6	253	4	US-09-042-785A-4	Sequence 4, Appli
40	180.5	12.6	311	3	US-08-911-423-8	Sequence 8, Appli
41	180.5	12.6	605	4	US-09-042-785A-23	Sequence 23, Appl
42	180.5	12.6	655	3	US-08-959-382-2	Sequence 2, Appli
43	179.5	12.6	197	2	US-08-505-606-1	Sequence 1, Appli
44	179	12.5	401	3	US-08-974-022-2	Sequence 2, Appli
45	178.5	12.5	283	5	PCT-US96-12374-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1  
US-08-236-918A-6  
; Sequence 6, Application US/08236918A  
; Patent No. 5674704  
; GENERAL INFORMATION:  
; APPLICANT: Alderson, Mark R.  
; APPLICANT: Goodwin, Raymond G.  
; APPLICANT: Smith, Craig A.  
; TITLE OF INVENTION: Cytokine Designated 4-1BB Ligand  
; NUMBER OF SEQUENCE: 18  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Kathryn A. Anderson, Immunex Corporation  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: Washington  
; COUNTRY: US  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple 7.5.3  
; SOFTWARE: Microsoft Word, Version #6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/236,918A  
; FILING DATE: 06-May-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,843  
; FILING DATE: 07-May-1993  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Anderson, Kathryn A.  
; REGISTRATION NUMBER: 32,172  
; REFERENCE/DOCKET NUMBER: 2801-B  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (206) 587-0430  
; TELEFAX: (206) 233-0644  
; INFORMATION FOR SEQ ID NO.: 6:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 256 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-08-236-918A-6

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Best Local Similarity 100.0%; Pred. No. 1.3e-118;  
Matches 256; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 121 LGTFNDQNGTGVCRPWTNCSLDGRSVLKTGTTERDVVCGPPVVSFSPSTTISVTPEGGPG 180  
QY 181 GHSLOVLTFLALTSALLALIFITLLFSVLKWKIRKPPHIFKQPFKTTGAAQEDACS 240  
DB 181 GHSLOVLTFLALTSALLALIFITLLFSVLKWKIRKPPHIFKQPFKTTGAAQEDACS 240  
QY 241 CRCPOEEGGGGYEL 256  
DB 241 CRCPOEEGGGGYEL 256

## RESULT 2

PCT-US96-03965-2  
; Sequence 2 Application PC/TUS9603965  
; GENERAL INFORMATION:  
; APPLICANT: Kwon, Byoung Se  
; APPLICANT: Kang, Chang-Yuil  
; TITLE OF INVENTION: Monoclonal antibody against human  
; TITLE OF INVENTION: receptor 4-1BB  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnard, Brown & Michaels  
; STREET: 306 East State Street, Suite 220  
; CITY: Ithaca  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 14850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
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; SOFTWARE: PatentIn Release #1.0, Version #1.30  
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; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/122,796  
; FILING DATE: 16-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/012,269  
; FILING DATE: 01-FEB-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/922,996  
; FILING DATE: 30-JUL-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/267,577  
; FILING DATE: 07-NOV-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Michaels, Christopher A  
; REGISTRATION NUMBER: 34,390  
; REFERENCE/DOCKET NUMBER: KW05  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 607-273-1711  
; TELEFAX: 607-273-2609  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 256 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
PCT-US96-03965-2

Query Match 100.0%; Score 1428; DB 5; Length 256;  
Best Local Similarity 100.0%; Pred. No. 1.3e-118;  
Matches 256; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 1 MGNVCYVWVIVLLVGCERKVGAVQNSCDNCPGTFCKRYNPVCKSCPPSTFSISGGQPN 60  
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QY 121 LGTFNDQNGTGVCRPWTNCSLDGRSVLKTGTTEKDVVCGPPVVSFSPSTTISVTPEGGPG 180  
DB 121 LGTFNDQNGTGVCRPWTNCSLDGRSVLKTGTTERDVVCGPPVVSFSPSTTISVTPEGGPG 180  
QY 181 GHSLOVLTFLALTSALLALIFITLLFSVLKWKIRKPPHIFKQPFKTTGAAQEDACS 240  
DB 181 GHSLOVLTFLALTSALLALIFITLLFSVLKWKIRKPPHIFKQPFKTTGAAQEDACS 240  
QY 241 CRCPOEEGGGGYEL 256  
DB 241 CRCPOEEGGGGYEL 256

## RESULT 3

US-08-974-022-52  
; Sequence 52 Application US/08974022  
; Patent No. 6015938  
; GENERAL INFORMATION:  
; APPLICANT: Boyle, William J.  
; APPLICANT: Lacey, David L.  
; APPLICANT: Calzone, Frank J.  
; APPLICANT: Chang, Ming-Shi  
; TITLE OF INVENTION: OSTEOPROTEGERIN  
; NUMBER OF SEQUENCES: 53  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Amgen Inc.  
; STREET: 1840 Behavilland Drive  
; CITY: Thousand Oaks  
; STATE: California  
; COUNTRY: USA  
; ZIP: 91320-1789  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/974,022  
; FILING DATE: 12-DEC-1995  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/577,788  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Winter, Robert B.  
; REFERENCE/DOCKET NUMBER: A-378  
; INFORMATION FOR SEQ ID NO: 52:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 191 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-974-022-52

Query Match 76.0%; Score 1085; DB 3; Length 191;  
Best Local Similarity 100.0%; Pred. No. 1.6e-88;  
Matches 191; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



**Qy**. 180 G---GHSLQVLTFLFALTS-ALLALIFITLLFSVLKWKIRKKPFHIFKQPFFKTTGAAQE 235  
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Qy	236	EDACSCRCPQEEEG	250
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Db	238	EDGSCRCFPQEEEG	252

RESULT 6  
PCT-US96-03965-8  
; Sequence 8, Application PC/TUS9603965

/ APPLICANT: KWON, BYOUNG SE  
 / APPLICANT: KANG, CHANG-YUILL  
 / TITLE OF INVENTION: Monoclonal antibody against human  
 / TITLE OF INVENTION: receptor 4-1BB  
 / NUMBER OF SEQUENCES: 10  
 / CORRESPONDENCE ADDRESS:  
 / ADDRESSEE: Barnard, Brown & Michaels  
 / STREET: 306 East State Street, Suite 220  
 / CITY: Ithaca  
 / STATE: NY  
 / COUNTRY: USA  
 / ZIP: 14850

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; COMPUTER READABLE FORM:
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; MEDIUM TYPE: Floppy disk
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; COMPUTER: IBM PC compatible
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; OPERATING SYSTEM: PC-DOS/MS-DOS
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; SOFTWARE: PatentIn Release #1.0, Version #1.30
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; CURRENT APPLICATION DATA:
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; APPLICATION NUMBER: PCT/US96/03965
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CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/122,796  
FILING DATE: 16-SEP-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/012,269  
FILING DATE: 01-FEB-1993

; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/922,996  
 ; FILING DATE: 30-JUL-1992  
 ;  
 ; PRIOR APPLICATION DATA: US 07/267,577  
 ; APPLICATION NUMBER: US 07/267,577  
 ; FILING DATE: 07-NOV-1988  
 ; ATTORNEY/AGENT INFORMATION:  
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REGISTRATION NUMBER: 347,390  
REFERENCE/DOCKET NUMBER: KW05  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 607-273-1711  
TELEFAX: 607-273-2609  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS.

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;
; LENGTH: 255 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US96-03965-8
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Best Local Similarity 58.4%; Pred. No. 7.7e-63;  
Matches 149; Conservative 31; Mismatches 67; Indels 8; Gaps

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Db	121	CFGTFNDQK-RGICRPWTNCSLDGKSVLVNGTKERDVVCGPSPADLSPGAS-SVTpp-AP	177
Qy	180	G---GHSLOVUTLFLATS-ALLALIFTLFLLSVLKWIRKKPHPHFKQPFKKTGAAQE	235
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Qy	236	EDAGSCRCPQEEGG	250
Db	238	EDGSCRFPEEEGG	252

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; Sequence 2, Application US/08816605

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; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/816,605
; FILING DATE: 13-MAR-1997

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CLASSIFICATION: 433  
ATTORNEY/AGENT INFORMATION:  
NAME: Brookes, A. Anders  
REGISTRATION NUMBER: 36,373  
REFERENCE/DOCKET NUMBER: PF254  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 301-309-8504

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; INFORMATION FOR SEQ ID NO: 2:
;
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 219 amino acids
;   TYPE: amino acid
;   TOPOLOGY: linear
;   MOLECULE TYPE: protein
; US-08-816-605-2

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Query Match	45.9%;	Score 656;	DB 2;	Length 219;
Best Local Similarity	51.2%;	Pred. No. 1.le-50;		
Matches 130;	Conservative 27;	Mismatches 55;	Indels 42;	Gaps

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QY 181 --GHSQVLTLFALTS-ALLLALIFITLLFSVLKWKRPFFHFKOPEKTKTTGAAQEE 236  
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QY 237 DACSCRCPOEEGG 250  
Db 203 DGCSRCFPEEEGG 216

RESULT 8  
US-08-996-139-15  
; Sequence 15, Application US/08996139  
; Patent No. 601729  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Dirk M.  
; APPLICANT: Galibert, Laurent  
; APPLICANT: Maraskovsky, Eugene  
; TITLE OF INVENTION: Receptor Activator of NF-kappaB  
; NUMBER OF SEQUENCES: 19  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Immunex Corporation, Law Department  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: WA  
; COUNTRY: USA  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple Operating System 7.5.5  
; SOFTWARE: Microsoft Word for Power Macintosh 6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/996,139  
; FILING DATE: 22 DECEMBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 60/064,671  
; FILING DATE: 14 OCTOBER 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/813,509  
; FILING DATE: 07 MARCH 1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/772,330  
; FILING DATE: 23 DECEMBER 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Perkins, Patricia Anne  
; REGISTRATION NUMBER: 34,693  
; REFERENCE/DOCKET NUMBER: 2851-A  
; TELEPHONE: (206)587-0430  
; TELEFAX: (206)233-0644  
; INFORMATION FOR SEQ ID NO: 15:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 625 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-996-139-15

Query Match 15.1%; Score 215; DB 3; Length 625;  
Best Local Similarity 28.6%; Pred. No. 2.6e-11;  
Matches 72; Conservative 27; Mismatches 91; Indels 62; Gaps 14;

QY 28 CDNCQPGTF-CRKNP-----VCKSCPSTF-SSIGQPNICRVCAGYFRFKKFCSTH 81  
Db 48 CSRCEPGKYLSSKCTPTSDSVCLPCGDEYLDTWNEEDKCLLHKVCDAGKALVAVDPGNH 107  
QY 82 NA--ECRCIEGFH---CLGPOCTRCCKCRPG-----QELTKQG-CKTCSLGTENDQ- 127  
Db 108 TAPPRCACTAGYHWNDC---ECCRNTECAPGGAQHPLQIKNKDTVCTPCLLGFFSDVF 164  
QY 128 NGTGVCRPWTNCSLDGRSVLKTGTTEKDVVCGPPVVSFSPSTTISVTP-EGGPGGHSIQV 186

Db 165 STDCKPWTNCTLLGKLEAHQGTTESDVVC-----SSWTLRPPKRAQAYLSLIV 217  
QY 187 LTLFLALTGALLLALIF-----ITLLFSVLKWKRPFFHFKOPEKTKTTGAAQEEA 238  
Db 218 LLLFISV--VVAAIIFGVYRKGKALTANLWNV-----NDA 254  
QY 239 CSCRCPOEEGG 250  
Db 255 CSSLGNKKESSG 266

RESULT 9  
US-08-995-659-15  
; Sequence 15, Application US/08995659  
; Patent No. 6242213  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Dirk M.  
; APPLICANT: Galibert, Laurent  
; APPLICANT: Maraskovsky, Eugene  
; TITLE OF INVENTION: Ligand for Receptor Activator of NF-kappaB  
; NUMBER OF SEQUENCES: 19  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Immunex Corporation, Law Department  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: WA  
; COUNTRY: USA  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple Operating System 7.5.5  
; SOFTWARE: Microsoft Word for Power Macintosh 6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/995,659  
; FILING DATE: 22 DECEMBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 60/064,671  
; FILING DATE: 14 OCTOBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/813,509  
; FILING DATE: 07 MARCH 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/772,330  
; FILING DATE: 23 DECEMBER 1996  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Perkins, Patricia Anne  
; REGISTRATION NUMBER: 34,693  
; REFERENCE/DOCKET NUMBER: 2852-A  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (206)587-0430  
; TELEFAX: (206)233-0644  
; INFORMATION FOR SEQ ID NO: 15:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 625 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-995-659-15

Query Match 15.1%; Score 215; DB 4; Length 625;  
Best Local Similarity 28.6%; Pred. No. 2.6e-11;  
Matches 72; Conservative 27; Mismatches 91; Indels 62; Gaps 14;

QY 28 CDNCQPGTF-CRKNP-----VCKSCPSTF-SSIGQPNICRVCAGYFRFKKFCSTH 81  
Db 48 CSRCEPGKYLSSKCTPTSDSVCLPCGDEYLDTWNEEDKCLLHKVCDAGKALVAVDPGNH 107

QY 82 NA--ECCIEGFH-----CLGPOCTRCCKCRPG-----QELFKQG-CKTCSLGTFNDQ- 127  
 Db 108 TAPRRCACTAGYHNSDC---ECCRNTECAPGFGAOPHLQLKNDKTCTCPLLGFFSDVF 164  
 QY 128 NGTGVCRPWTNCSLDGRSVLKTGTTKDVVCGPPVVSFSTTISVTP-EGGPGGHSLOV 186  
 Db 165 SSTDKCKPWTNCTLLGKLEAHOGTTESDVVC-----SSMTLRRPPKKAQAYLPLSLIV 217  
 QY 187 LTLFLALTSALLLALIF-----ITLLFSVLKWKRPKPHIFKQPKFTTGAQAQEDA 238  
 Db 218 LLLFISV--VVAAIFGVYRKGRKALFANLWNV-----NDA 254  
 QY 239 CSCRCPOEEGG 250  
 Db 255 CSSLSGNKSSG 266

# RESULT 10

US-09-041-886-27  
 ; Sequence 27, Application US/09041886  
 ; Patent No. 6235872  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bredesen, Dale E.  
 ; APPLICANT: Rabizadeh, Shiroz  
 ; TITLE OF INVENTION: Prosopoptotic Peptides, Dependence  
 ; TITLE OF INVENTION: Polypeptides and Methods of Use  
 ; NUMBER OF SEQUENCES: 72  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Campbell & Flores LLP  
 ; STREET: 4370 La Jolla Village Drive, Suite 700  
 ; CITY: San Diego  
 ; STATE: California  
 ; COUNTRY: United States  
 ; ZIP: 92122  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/09/041,886  
 ; FILING DATE:  
 ; CLASSIFICATION:  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Campbell, Cathryn A.  
 ; REGISTRATION NUMBER: 31,815  
 ; REFERENCE/DOCKET NUMBER: P-LJ 2626  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (619) 535-9001  
 ; TELEFAX: (619) 535-8949  
 ; INFORMATION FOR SEQ ID NO: 27:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 276 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-09-041-886-27

Query Match 14.6%; Score 208.5; DB 4; Length 276;  
 Best Local Similarity 25.7%; Pred. No. 3.9e-11;  
 Matches 67; Conservative 37; Mismatches 108; Indels 49; Gaps 11;  
 QY 18 CEKVGAVONS--CDNCOPG-----TFCRKYNPV-CKSCPPSTF-SSIGGQPNICRVCAG 69  
 Db 26 CREKQYLINSQCCSLCPGQKLVSDCTETETELCPGSEFLDTWNRETHCHQHKYCDP 85  
 QY 70 Y--FRFKFCSSTHNAECIEGFHCLGPOCTRC--EKDCRPG-----QELTKQCKT 118  
 Db 86 NLGLRVQOKGTSETDTTCTCEEGWHCTSEACESCVLHRSCTSPGFGVKQIATGVSDTICEP 145  
 QY 119 CSLGTF-NDQNGTGVCRPWTNCSLDGRSVLKTGTTKDVVCGPPVVSFSPSTTISVTP 177

Db 146 CPVGFSSVNSAFKCHPWTSCETKDLVVQOAGTKNTKDVVCGPQ----- 189  
 QY 178 GPGGHSLOVLTFLALTSALLLALIFITLLFSVLKWKRPKPHIFKQPKF-----K 228  
 Db 190 -DRLRALVVIPIIFILFAILLVLFK---KVAKKPTNKAPHKQEPQEIFNPDDLPGS 245  
 QY 229 TTGAQOEEDACSCRCPOEEGG 249  
 Db 246 NTAAPVQETLHGCPQVTQEDG 266

## RESULT 11

US-09-042-785A-10  
 ; Sequence 10, Application US/09042785A  
 ; Patent No. 6194151  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Busfield, Samantha J  
 ; TITLE OF INVENTION: NOVEL MOLECULES OF THE TNF RECEPTOR SUPERFAMILY  
 ; TITLE OF INVENTION: AND USES THEREFOR  
 ; NUMBER OF SEQUENCES: 31  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: LAHIVE & COCKFIELD, LLP  
 ; STREET: 28 State Street  
 ; CITY: Boston  
 ; STATE: Massachusetts  
 ; COUNTRY: USA  
 ; ZIP: 02109  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/09/042,785A  
 ; FILING DATE: 17-MAR-1998  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/938,896  
 ; FILING DATE: 26-SEP-1997  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Mandragouras, Amy E  
 ; REGISTRATION NUMBER: 36,207  
 ; REFERENCE/DOCKET NUMBER: MEI-001CP  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (617)227-7400  
 ; TELEFAX: (617)742-4214  
 ; INFORMATION FOR SEQ ID NO: 10:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 277 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: peptide  
 ; FRAGMENT TYPE: internal  
 ; US-09-042-785A-10

Query Match 14.6%; Score 208.5; DB 4; Length 277;  
 Best Local Similarity 25.7%; Pred. No. 3.9e-11;  
 Matches 67; Conservative 37; Mismatches 108; Indels 49; Gaps 11;

QY 18 CEKVGAVONS--CDNCOPG-----TFCRKYNPV-CKSCPPSTF-SSIGGQPNICRVCAG 69  
 Db 26 CREKQYLINSQCCSLCPGQKLVSDCTETETELCPGSEFLDTWNRETHCHQHKYCDP 85  
 QY 70 Y--FRFKFCSSTHNAECIEGFHCLGPOCTRC--EKDCRPG-----QELTKQCKT 118  
 Db 86 NLGLRVQOKGTSETDTTCTCEEGWHCTSEACESCVLHRSCTSPGFGVKQIATGVSDTICEP 145  
 QY 119 CSLGTF-NDQNGTGVCRPWTNCSLDGRSVLKTGTTKDVVCGPPVVSFSPSTTISVTP 177  
 Db 146 CPVGFSSVNSAFKCHPWTSCETKDLVVQOAGTKNTKDVVCGPQ----- 189  
 QY 178 GPGGHSLOVLTFLALTSALLLALIFITLLFSVLKWKRPKPHIFKQPKF-----K 228

Db 190 -DRRALVPIIINGILFAILLVLFK--KAAKRTNNAHPHKQEPQELNFPDDLPGS 245

QY 229 TTGAOEEDACSCRCPOEEES 249

Db 246 NTAAPVQETLHGCGPVYQEDGS 266

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RESULT 12
US-08-996-139-4
Sequence 4, Application US/08996139
Patent No. 6017729
GENERAL INFORMATION:
APPLICANT: Anderson, Dirk M.
APPLICANT: Galibert, Laurent
APPLICANT: Maraskovsky, Eugene
TITLE OF INVENTION: Receptor Activator of NF-kappaB
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Immune Corporation, Law Department
STREET: 51 University Street
CITY: Seattle
STATE: WA
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Power Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Power Macintosh 6.0.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/996,139
FILING DATE: 22 DECEMBER 1997
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 60/064,671
FILING DATE: 14 OCTOBER 1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/813,509
FILING DATE: 07 MARCH 1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USSN 08/772,330
FILING DATE: 23 DECEMBER 1996
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia Anne
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 2851-A
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206)587-0430
TELEFAX: (206)233-0644
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 451 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-996-139-4

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	Query Match	14.4%	Score 205.5;	DB 3;	Length 451;
	Best Local Similarity	29.9%;	Pred. No. 1.2e-10;		
	Matches 61; Conservative	25;	Mismatches 71;	Indels 47;	Gaps 11.
QY	28 CDNQPGTFCK-----YNPYCKSCPSTF--SSIGGPNMCRCV-----AGYF 71				
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Db	47 CNKEPGRYMSSKCTTSDSYCLPCGPDEYLDVSNWEDKCLHKVCGRKALAVAVAG-- 104				
	:   :   :	:   :   :	:   :   :	:   :   :	
QY	72 RKKFCSTTHAECECIEGFH-----CLGPOCTRCKDPRG-----QELTKQG-CRKS 120				
	:   :   :	:   :   :	:   :   :	:   :   :	
Db	105 -----NSTPRRCACGTAGYHMSDC---ECCRRNTECAPGLGAQHPLQNDKYCPCL 155				
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QY	121 LGTFENDQ-NRGVGCRPMWNCSLDGRSVLAKTTETLDDVYCGRPVVSFSPSTITSVPBEGP 179				
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D<sub>b</sub> 156 AGYSDSAFSSIDKCRPMTNCTFLCKRHHGTEKSDAVCSSLPARKPPNEPHYLP-- 213  
Q<sub>y</sub> 180 GGHSLQVLTFLALTSALLLALIF 203  
          | : | | : : | : | |  
D<sub>b</sub> 214 ----LITLLLFASY--ALVAIAITF 231

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RESULT      13
US-08-995-659-4
: Sequence 4, Application US/08995659
: Patent No. 6242213
: GENERAL INFORMATION:
: APPLICANT: Anderson, Dirk M.
: APPLICANT: Gilbert, Laurent
: APPLICANT: Maratskovsky, Eugene
: TITLE OF INVENTION: Ligand for Receptor Activator of NF-kappaB
: NUMBER OF SEQUENCES: 19
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Immunex Corporation, Law Department
: STREET: 51 University Street
: CITY: Seattle
: STATE: WA
: COUNTRY: USA
: ZIP: 98101
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: Apple Power Macintosh
: OPERATING SYSTEM: Apple Operating System 7.5.5
: SOFTWARE: Microsoft Word for Power Macintosh 6.0.1
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/995,659
: FILING DATE: 22 DECEMBER 1997
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: USSN 60/0064,671
: FILING DATE: 14 OCTOBER 1997
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: USSN 08/813,509
: FILING DATE: 07 MARCH 1997
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: USSN 08/772,330
: FILING DATE: 23 DECEMBER 1996
: CLASSIFICATION:
: ATTORNEY/AGENT INFORMATION:
: NAME: Perkins, Patricia Anne
: REGISTRATION NUMBER: 34,693
: REFERENCE/DOCKET NUMBER: 2852-A
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (206)587-0430
: TELEFAX: (206)233-0644
: INFORMATION FOR SEQ ID NO: 4:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 451 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: IS-08-995-659-4

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[illegible]

QY 121 LGTFNDQ-NGTGVCRPWTNCSLDGRSVLKGTGTEKDVVCGPPVVSFSPSTTISVTPEGGP 179  
DB 156 AGYSDAFSTDKCRPWTNCTFLGKRVHGHTEKSDAVCSSLPARKPPNEPHVYLPG-- 213  
QY 180 GGHSLOVLTFLALTSALLALIF 203  
DB 214 ----LIILLFASV--ALVAALIF 231

RESULT 14  
US-08-996-139-2  
; Sequence 2, Application US/08996139  
; Patent No. 6017729  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Dirk M.  
; APPLICANT: Galibert, Laurent  
; APPLICANT: Maraskovsky, Eugene  
; TITLE OF INVENTION: Receptor Activator of NF-kappaB  
; NUMBER OF SEQUENCES: 19  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Immunex Corporation, Law Department  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: WA  
; COUNTRY: USA  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple Operating System 7.5.5  
; SOFTWARE: Microsoft Word for Power Macintosh 6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/996,139  
; FILING DATE: 22 DECEMBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 60/064,671  
; FILING DATE: 14 OCTOBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/813,509  
; FILING DATE: 07 MARCH 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/772,330  
; FILING DATE: 23 DECEMBER 1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Perkins, Patricia Anne  
; REGISTRATION NUMBER: 2851-A  
; REFERENCE/DOCKET NUMBER: 2851-A  
; TELEPHONE: (206)587-0430  
; TELEFAX: (206)233-0644  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 591 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-08-996-139-2

Query Match 14.4%; Score 205.5; DB 3; Length 591;  
Best Local Similarity 29.9%; Pred. No. 1.7e-10;  
Matches 61; Conservative 25; Mismatches 71; Indels 47; Gaps 11;  
QY 28 CDNCQPTGTCRK-----YNPVKSCPPSTP-SSIGGQPNICRVC-----AGYF 71  
DB 22 CNKCEPGKYMSSKCTTTSDSVCLPCGPDYLDWSNEEDKCLLHKVCDTGKALVAVAG-- 79  
QY 72 RFKFCSTTHNAECIEGFH---CLGPOCTRCEKDCRPG-----QELTKQG-CKTCS 120  
DB 80 -----NSTTPRCACVAGHWSQDC---ECCRRNTECAPGLGAQHPLQLNKDVTCKPCL 130  
QY 121 LGTFNDQ-NGTGVCRPWTNCSLDGRSVLKGTGTEKDVVCGPPVVSFSPSTTISVTPEGGP 179

DB 131 AGYSDAFSTDKCRPWTNCTFLGKRVHGHTEKSDAVCSSLPARKPPNEPHVYLPG-- 188  
QY 180 GGHSLOVLTFLALTSALLALIF 203  
DB 189 ----LIILLFASV--ALVAALIF 206

RESULT 15  
US-08-995-659-2  
; Sequence 2, Application US/08995659  
; Patent No. 6242213  
; GENERAL INFORMATION:  
; APPLICANT: Anderson, Dirk M.  
; APPLICANT: Galibert, Laurent  
; APPLICANT: Maraskovsky, Eugene  
; TITLE OF INVENTION: Ligand for Receptor Activator of NF-kappaB  
; NUMBER OF SEQUENCES: 19  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Immunex Corporation, Law Department  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: WA  
; COUNTRY: USA  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple Operating System 7.5.5  
; SOFTWARE: Microsoft Word for Power Macintosh 6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/995,659  
; FILING DATE: 22 DECEMBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 60/064,671  
; FILING DATE: 14 OCTOBER 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/813,509  
; FILING DATE: 07 MARCH 1997  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: USSN 08/772,330  
; FILING DATE: 23 DECEMBER 1996  
; CLASSIFICATION:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Perkins, Patricia Anne  
; REGISTRATION NUMBER: 34,693  
; REFERENCE/DOCKET NUMBER: 2852-A  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (206)587-0430  
; TELEFAX: (206)233-0644  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 591 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-08-995-659-2

Query Match 14.4%; Score 205.5; DB 4; Length 591;  
Best Local Similarity 29.9%; Pred. No. 1.7e-10;  
Matches 61; Conservative 25; Mismatches 71; Indels 47; Gaps 11;  
QY 28 CDNCQPTGTCRK-----YNPVKSCPPSTP-SSIGGQPNICRVC-----AGYF 71  
DB 22 CNKCEPGKYMSSKCTTTSDSVCLPCGPDYLDWSNEEDKCLLHKVCDTGKALVAVAG-- 79  
QY 72 RFKFCSTTHNAECIEGFH---CLGPOCTRCEKDCRPG-----QELTKQG-CKTCS 120  
DB 80 -----NSTTPRCACVAGHWSQDC---ECCRRNTECAPGLGAQHPLQLNKDVTCKPCL 130



Wed Sep 12 13:32:13 2001

Qy	121	LGTFENDQ - NGTGVCRPWTNCSLDGRSVLKTTGTTTEKDWCGPPVWVSFPTTTSVTPEGCP	179
Db	131	AGYFSADFSTYDKCRPWTNCTFTLGKRVHHGTEKSDAVCSSSLPARKPPNEPHVLPG - -	188
Qy	180	GGHSLQVLTLFLATLSALLLALIF	203
Db	189	----LIILLFASV--ALVAAIIF	206

Search completed: September 12, 2001, 11:53:45  
Job time: 54 sec

Result No.	Query			ID	Description
	Score	Match	Length		
1	2347	99.9	2350	4	Sequence 1, Appli
	339	14.4	838	5	Sequence 11, Appli
	339.2	14.4	1599	5	Sequence 31, Appli
C 4	338.8	14.4	1453	5	Sequence 387, App
	338.8	14.4	1453	5	Sequence 6896, Ap
	333.4	14.2	377	5	Sequence 9553, Ap
C 6	213.2	9.1	458	5	Sequence 26, Appli
	179.8	7.7	1669	5	Sequence 5818, Ap
	140.4	6.0	460	5	Sequence 45, Appli
C 10	128	5.4	805	5	Sequence 443, App
	128	5.4	805	5	Sequence 36499, A
	84.6	3.6	575	5	Sequence 37994, A
C 12	66	2.8	429	5	Sequence 37995, A
	65	2.8	428	5	Sequence 44, Appli
	58.4	2.5	284	5	Sequence 319, App
C 17	51.8	2.2	700	5	Sequence 8267, Ap
	51.8	2.2	637	5	Sequence 8266, Ap
	50	2.1	638	5	Sequence 8264, Ap
C 19	50	2.1	5876	5	Sequence 6479, Ap
	48.4	2.1	6317	5	Sequence 2272, Ap
	47.4	2.0	501	5	Sequence 2834, Ap
C 23	46.2	2.0	4369	5	Sequence 11570, A
	45.2	1.9	465	5	Sequence 1864, Ap
	45.2	1.9	4998	5	Sequence 704, App
C 26	45.2	1.9	3217	5	Sequence 1864, Ap
	45.2	1.9	80970	5	Sequence 704, App
	45.2	1.9	80970	5	Sequence 704, App



; TITLE OF INVENTION: METHODS OF USING HUMAN RECEPTOR ON  
; FILE REFERENCE: 740.011US3  
; CURRENT APPLICATION NUMBER: US/09/877,336  
; CURRENT FILING DATE: 2001-06-08  
; PRIOR APPLICATION NUMBER: 09/007,097  
; PRIOR FILING DATE: 1998-01-14  
; PRIOR APPLICATION NUMBER: 08/409,851  
; PRIOR FILING DATE: 1995-03-23  
; PRIOR APPLICATION NUMBER: 08/422,796  
; PRIOR FILING DATE: 1993-09-16  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 838  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-877-336-1

Query Match 14.4%; Score 339.2; DB 5; Length 838;  
Best Local Similarity 67.8%; Pred. No. 1.7e-72;  
Matches 537; Conservative 0; Mismatches 243; Indels 12; Gaps 4;  
QY 119 agtgcctgtgcatgtgacatttcgcatgggaacacactgtttacaacgtggtggtcatt 178  
Db 14 agtatcacctgtcgagatttcacatgggaacagctgtttacaacatagtagccact 73  
QY 179 gtgcctgtcgtagtggtgtgagaaggtggagccgtgcgaactcctgtgataactgt 238  
Db 74 ctgtgtcgtgctcaactttgagaggaacaagatcattgcaggatcctttagtaactgc 133  
QY 239 cagcctgtgtactttgcagaaataac---aatccagctgcgaagagctgccctcccaagt 295  
Db 134 ccagctggtacattctgtgataataacaggaatcagatttgcagctcctcccaaat 193  
QY 296 acccttcacgataagtggaacgcgaactgttaactatcgcagagtggtgcaggctat 355  
Db 194 agttctcagcgcagtggaacaaagacctgtgacattgcagcgagctgttaaagggttt 253  
QY 356 ttcaggttcaagaagtttgcctctcaccacaacgcgcagtgagtgatcattgaagga 415  
Db 254 ttcagaccaggaagagtggtctctccaccagcaatgcagagtgctgactcactcccg 313  
QY 416 ttccattgcttggtggccacagtgccacagatgtgaagaagactgcagcctggccagag 475  
Db 314 ttctactgctggggcaggatgcagcatgtgtgaacagatgtagaacaggtcaagaa 373  
QY 476 ctaacgaagcaggggtgcacaaacctgtagcttgggaacatttaatagaccgaacggtact 535  
Db 374 ctgacaaaaaaggtgtgaagactgtgtcttgggaagctgtgctgtgtaagtg 430  
QY 536 ggcgtgtgcacctggagcaactcctctcagaaggaaggtctgtgcttaagaccggg 595  
Db 431 ggcattgtgcacctggacaaactgtcttggatgggaagctgtgctgtgtaagtg 490  
QY 596 accacgaggaagacgtggtgtgacccccctgtgtgagctctctccag---tacc 652  
Db 491 acgaagagagggagcgtggtctgtgaccatctccagccagcactctctccggagatcc 550  
QY 653 accatttctgtactcagagggagaccagggaggggcaactccttgcaggttccctacctg 712  
Db 551 tctgtgaccccgctccctgcgagagccaggaacactctccgacatcctcctctcttc 610  
QY 713 ttctggcctgacatcg---gcttggctgtggccctgactctcattactctctctt 769  
Db 611 ttctgtgctgacgtgcagctggtgtgcttctctctgtcttctcctcagctccgttcc 670  
QY 770 tctgtgctcaaatgatacaggaataatccccacatatattcaagcaaccatttaagaag 829  
Db 671 tctgtgttataacgggggcagaaagaaacctgttatataatacaaacacatttatgaga 730  
QY 830 accactggagcagctcaagaggaagatgctgtgctgctgcgatctcttactctctctt 889

Db 731 ccagtaacaaactactcaagaggaagatggtgtagctccgatttccagagaagaagaa 790  
QY 890 ggagagagagga 901  
Db 791 ggagatgtgaa 802  
RESULT 3  
US-09-760-455-11  
; Sequence 11, Application US/09760455  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PT270  
; CURRENT APPLICATION NUMBER: US/09/760,455  
; CURRENT FILING DATE: 2001-01-16  
; Prior application data removed - consult PALM or file wrapper  
; NUMBER OF SEQ ID NOS: 96  
; SOFTWARE: PatentIn ver. 2.0  
; SEQ ID NO 11  
; LENGTH: 1599  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-760-455-11  
Query Match 14.4%; Score 339.2; DB 5; Length 1599;  
Best Local Similarity 67.8%; Pred. No. 2.2e-72;  
Matches 537; Conservative 0; Mismatches 243; Indels 12; Gaps 4;  
QY 119 agtgcctgtgcatgtgacatttcgcatgggaacacactgtttacaacgtggtggtcatt 178  
Db 127 agtatcacctgtccagatttcacatgggaacagctgtttacaacatagtagccact 186  
QY 179 gtgcctgtcgtagtggtgtgagaaggtggagccgtgcgaactcctgtgataactgt 238  
Db 187 ctgtgtcgtgctcaactttgagaggaagatcattgcaggatcctttagtaactgc 246  
QY 239 cagcctgtgtactttgcagaaataac---aatccagctgcgaagagctgccctcccaagt 295  
Db 247 ccagctggtacattctgtgataataacaggaatcagatttgcagcctctgctcccaat 306  
QY 296 acccttcacgataagtggtggaacgcgcagctgttaacatctgcagagtggtgcaggctat 355  
Db 307 agttctcagcgcaggtggacaaaggacctgtgacatgcagcgagtgtaagggtgt 366  
QY 356 ttcaggttcaagaagtttgcctctcaccacaacgcggagtggtgagtgcaattgaagga 415  
Db 367 ttcaggaaccaggaagagtggttctctccaccagcaatgcagagtgactgcactccagg 426  
QY 416 ttccattgcttggtggccacagtgccaccagatgtgaagaagactgcagcctggccagag 475  
Db 427 ttccactgcttggtggggcaggatgcagcagtggtgacaggatgtgaacaaaggtcaagaa 486  
QY 476 ctaacgaagcaggggtgcacaaacctgtagcttgggaacatttaatacaggaacggtact 535  
Db 487 ctgacaaaaaaggtgtgaagactgttgccttgggaacatttaacagatcagaacg---t 543  
QY 536 ggcgtgtgacacctggacgaactgctctctagcaggaaggtgtgcttgaagaccggg 595  
Db 544 ggcattctgcacctggacaaactgtcttggatggaaagctgtgctgtgtaagtg 603  
QY 596 accacgagagaagagcgtggtgtggaacccctgtgtgagcttctctccag---tacc 652  
Db 604 acgaagagagggagcgtggtgtgtggacacatctccagccacctctccgggagcatcc 663  
QY 653 accatttctgtgactccagagggaggaacagggagggcactcttgcaggttcttaccttg 712  
Db 664 tctgtgaccccgctgcccctgcgagagagccaggaactctccgcagatcatctcttc 723  
QY 713 ttctggtcgtgacatcg---gcttggctgtggccctgatcttcttactctctctt 769



		Matches	337; Conservative	0; Mismatches	6; Indels	0; Gaps
QY	106	cacagaaaaccacagtcctctgtgcattgcacatttcgcgcattgcggaacacaaactgtttacaa	165			
Db	35	ccctgagatcgaaagtgctctgtgcattgcacatttcgcgcattgcggaacacaaactgtttacaa	94			
QY	166	ctgtggtggtcattgtctgtcgtctagtgtggctgtgtgaaaggtgtggagccgtgcagaacttc	225			
Db	95	ctgtggtggtcattgtctgtcgtctagtgtggctgtgtgaaaggtgtggagccgtgcagaactc	154			
QY	226	ctgtgataactgtcacccctgggtactttctgcagaaaaatacaatccactgctgcagaagctgt	285			
Db	155	ctgtgataactgtcacccctgggtactttctgcagaaaaatacaatccactgctgcagaagctgt	214			
QY	286	ccctccaagttaacctttctccagcataggtggacagccggaactgttaacatctgcagagtgtg	345			
Db	215	ccctccaagttaacctttctccagcataggtggacagccggaactgttaacatctgcagagtgtg	274			
QY	346	tgcaggctatttcaggtttcaagaagttttgtctctctaccccaacacgcggaggtgtgagttg	405			

USCIS 700 432 28  
; Sequence 26, Application US/09760455  
; GENERAL INFORMATION:



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Db 217 AGGAGACTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 158
Oy 662 gtagctccaggaaggaagaccagagacccctctcttccagagcttcttcttcttcttcttctt 721
Db 157 CGGCTGCCCCCTGGCAGAGAGCCAGACACTCTCCGACATCATCTCTCTCTCTCTCTCTCTGCG 98
Oy 722 ctgacatcg---gcttctgtctgtgcccctgacatcttcttcttcttcttcttcttcttcttct 778
Db 97 CTGACGCTGCACGCGCTGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 38
Oy 779 aaatgatcaggaagaaatltccccacatattcaagc 815
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US-09-760-485-443/c
; Sequence 443, Application US/09760485
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: P1217
; CURRENT APPLICATION NUMBER: US/09/760,485
; CURRENT FILING DATE: 2001-01-16
; Prior application data removed - consult PAM or file wrapper
; NUMBER OF SEQ ID NOS: 1477
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 443
; LENGTH: 805
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (73)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (783)
; OTHER INFORMATION: n equals a,t,g, or c
US-09-760-485-443
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Query Match 5.4%; Score 128; DB 5; Length 805;
Best Local Similarity 67.4%; Pred. No. 2,9e-21;
Matches 227; Conservative 0; Mismatches 101; Indels 9; Gaps 3;
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Oy 545 cgaacctgtgacgaactgtctctttagacggaagtgtgtgttcttaagccggagacgaagag 604
Db 277 CGACCCCTGGACAACACTGTTCTTTGGATGGAAGTCTGTCTCTGTGTAATGGAGCAGAGAG 218
Oy 605 aaggacgtgtgtgtgtgagccccctgtgtgagcttcttcttccag---taaccacattct 661
Db 217 AGGAGACTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 158
Oy 662 gtagctccaggaaggaagaccagagacccctcttccagagcttcttcttcttcttcttcttcttct 721
Db 157 CGGCTGCCCCCTGGCAGAGAGCCAGACACTCTCCGACATCATCTCTCTCTCTCTCTCTCTGCG 98
Oy 722 ctgacatcg---gcttctgtctgtgcccctgacatcttcttcttcttcttcttcttcttcttct 778
Db 97 CTGACGCTGCACGCGCTGTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 38
Oy 779 aaatgatcaggaagaaatltccccacatattcaagc 815
Db 37 AAACGGGGCAGAAAGAACTCCTGTATATATTCAAAC 1
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US-09-912-292-36499
; Sequence 36499, Application US/09912292
; GENERAL INFORMATION:
; APPLICANT: Rosen, et al.
; TITLE OF INVENTION: Human Genes, Sequences, and Expression Products 101
; FILE REFERENCE: PO-101
; CURRENT APPLICATION NUMBER: US/09/912,292
; CURRENT FILING DATE: 2001-07-26
; PRIOR APPLICATION NUMBER: 08/103,746
; PRIOR FILING DATE: 1993-08-09
; PRIOR APPLICATION NUMBER: 09/859,417
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: 08/103,743
; PRIOR FILING DATE: 1993-08-09
; PRIOR APPLICATION NUMBER: 09/741,827
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 09/813,154
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 08/196,482
; PRIOR FILING DATE: 1994-02-15
; PRIOR APPLICATION NUMBER: 09/783,587
; PRIOR FILING DATE: 2001-02-15
; PRIOR APPLICATION NUMBER: 08/196,481
; PRIOR FILING DATE: 1994-02-15
; PRIOR APPLICATION NUMBER: 08/220,662
; PRIOR FILING DATE: 1994-03-31
; PRIOR APPLICATION NUMBER: 08/220,661
; PRIOR FILING DATE: 1994-03-31
; PRIOR APPLICATION NUMBER: 08/275,627
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: 08/345,704
; PRIOR FILING DATE: 1994-11-21
; PRIOR APPLICATION NUMBER: 09/859,662
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: 08/401,881
; PRIOR FILING DATE: 1995-03-10
; PRIOR APPLICATION NUMBER: 09/782,161
; PRIOR FILING DATE: 2001-02-14
; PRIOR APPLICATION NUMBER: 08/790,776
; PRIOR FILING DATE: 1997-01-30
; PRIOR APPLICATION NUMBER: 60/010,803
; PRIOR FILING DATE: 1996-01-30
; PRIOR APPLICATION NUMBER: 08/799,180
; PRIOR FILING DATE: 1997-02-12
; PRIOR APPLICATION NUMBER: 60/011,618
; PRIOR FILING DATE: 1996-02-13
; PRIOR APPLICATION NUMBER: 08/803,609
; PRIOR FILING DATE: 1997-02-21
; PRIOR APPLICATION NUMBER: 60/011,985
; PRIOR FILING DATE: 1996-02-21
; PRIOR APPLICATION NUMBER: 08/971,050
; PRIOR FILING DATE: 1997-11-14
; PRIOR APPLICATION NUMBER: 60/031,038
; PRIOR FILING DATE: 1996-11-18
; PRIOR APPLICATION NUMBER: 08/975,985
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/031,221
; PRIOR FILING DATE: 1996-11-25
; PRIOR APPLICATION NUMBER: 08/985,366
; PRIOR FILING DATE: 1997-12-04
; PRIOR APPLICATION NUMBER: 09/842,827
; PRIOR FILING DATE: 2001-04-27
; PRIOR APPLICATION NUMBER: 60/032,782
; PRIOR FILING DATE: 1996-12-06
; PRIOR APPLICATION NUMBER: 09/076,898
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/047,004
; PRIOR FILING DATE: 1997-05-13
; PRIOR APPLICATION NUMBER: 09/078,614
; PRIOR FILING DATE: 1998-05-14
; PRIOR APPLICATION NUMBER: 60/046,498
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[illegible]

Search completed: September 10, 2001, 19:24:30  
Job time: 5029 sec

	Query Match	2.5%;	Score 58.4;	DB 5;	Length 284;
	Best Local Similarity	63.3%;	Pred. No. 0.00015;		
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Db	124	ctggggggaccttgrrggttttcaggaccaggaaggagtggtccctcccaccagnatssc	183		
Qy	393	cggsgtgtgagtcgatgaagatttcattctctggggccacagtcaccacagatgtgaaa	452		
Db	184	cgccctgtactgcactccagggtttcactgccctgggggcaggatgcagcatgtgtgaac	243		
Qy	453	aggactgagcctggccaaggatgatacgaagcagggt	490		
Db	244	agqattgccacaagncacaaactgcacaaaaaaggt	281		

GenCore version 4.5  
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OM nucleic - nucleic search, using sw model

Run on: September 10, 2001, 15:40:47 ; Search time 85.08 seconds  
(without alignments)  
5228.974 Million cell updates/sec

Title: US-08-012-269A-1  
Perfect score: 2350  
Sequence: 1 atgtccatgaactctgagt.....ctctttctcgtatgtagac 2350

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 324599 seqs, 94655562 residues

Total number of hits satisfying chosen parameters: 649198

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents,NA:\*  
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2: /cgn2\_6/ptodata/1/ina/5B\_COMB.seq:\*  
3: /cgn2\_6/ptodata/1/ina/6A\_COMB.seq:\*  
4: /cgn2\_6/ptodata/1/ina/6B\_COMB.seq:\*  
5: /cgn2\_6/ptodata/1/ina/PCTUS\_COMB.seq:\*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2330.8	99.2	2347	5	PCT-US96-03965-1
2	768	32.7	768	1	US-08-236-918A-5
3	339.2	14.4	838	5	PCT-US94-10457-1
4	339.2	14.4	838	5	PCT-US96-03965-7
5	339.2	14.4	1415	1	US-08-236-918A-7
6	245.8	10.5	946	2	US-08-816-605-1
7	51.8	2.2	5543	2	US-08-687-080-101
8	42.6	1.8	48974	4	US-08-920-422-17
9	38.8	1.7	340	4	US-08-599-252-105
10	38.8	1.7	340	5	PCT-US96-06352-105
11	38.8	1.7	340	5	PCT-US96-06583-105
12	38.6	1.6	5053	2	US-08-685-576-2
13	38	1.6	8920	2	US-08-446-855A-1
14	38	1.6	8920	2	US-09-150-741-1
15	38	1.6	43676	3	US-09-356-952-12
16	37.8	1.6	202	1	US-08-222-177A-38
17	37.4	1.6	3681	1	US-08-571-758-3
18	37.4	1.6	3681	1	US-08-909-984A-3
19	37.4	1.6	3681	1	US-08-909-983-3
20	37.4	1.6	7868	6	5175383-1
21	37	1.6	19557	5	PCT-US92-06300-1
22	36.8	1.6	1280	3	US-09-188-930-246
23	36.8	1.6	7218	1	US-08-232-463-14
24	36.8	1.6	19557	5	PCT-US92-06300-1
25	36.6	1.6	221	1	US-08-222-177A-17
26	36.6	1.6	2997	3	US-08-486-343A-3
27	36.6	1.6	2997	5	PCT-US95-07349-3

c	28	36.4	1.5	7218	1	US-08-232-463-14
	29	36.4	1.5	16442	3	US-08-781-891-208
	30	36.2	1.5	240	1	US-08-222-177A-32
	31	36.2	1.5	870	2	US-08-420-629-9
c	32	36	1.5	191	1	US-08-222-177A-21
c	33	36	1.5	605	1	US-08-599-252-89
c	34	36	1.5	605	5	PCT-US96-06352-89
c	35	36	1.5	605	5	PCT-US96-06583-89
	36	35.8	1.5	1584	5	PCT-US92-02091-5
	37	35.8	1.5	2186	3	US-08-959-382-1
	38	35.8	1.5	8010	5	PCT-US95-11859-2
c	39	35.8	1.5	17949	4	US-09-087-465-3
	40	35.6	1.5	7970	1	US-08-135-511-31
	41	35.6	1.5	7997	1	US-08-187-453-31
	42	35.6	1.5	7997	1	US-08-562-985A-7
c	43	35.4	1.5	230	1	US-08-222-177A-16
	44	35.4	1.5	243	1	US-08-222-177A-40
	45	35.4	1.5	380	1	US-08-599-252-107

ALIGNMENTS

RESULT 1  
PCT-US96-03965-1  
; Sequence 1, Application PC/TUS9603965  
; GENERAL INFORMATION:  
; APPLICANT: Kwon, Byoung Se  
; APPLICANT: Kang, Chang-Yuill  
; TITLE OF INVENTION: Monoclonal antibody against human  
; TITLE OF INVENTION: receptor 4-1BB  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnard, Brown & Michaels  
; STREET: 306 East State Street, Suite 220  
; CITY: Ithaca  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 14850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US96/03965  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/122,796  
; FILING DATE: 16-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/012,269  
; FILING DATE: 01-FEB-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/922,996  
; FILING DATE: 30-JUL-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/267,577  
; FILING DATE: 07-NOV-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Michaels, Christopher A  
; REGISTRATION NUMBER: 34,390  
; REFERENCE/DOCKET NUMBER: KWO5  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 607-273-1711  
; TELEFAX: 607-273-2609  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2347 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear

MOLECULE TYPE: cDNA to mRNA  
ORIGINAL SOURCE:  
ORGANISM: murine 4-1BB  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 146..916  
FEATURE:  
NAME/KEY: mat\_peptide  
LOCATION: 146..913  
PUBLICATION INFORMATION:  
AUTHORS: Kwon, Byoung Se  
AUTHORS: et al.,  
TITLE: cDNA sequences of two inducible T-cell genes  
JOURNAL: Proc. Natl. Acad. Sci. U.S.A.  
VOLUME: 86  
ISSUE: March  
PAGE: 1963-1967  
DATE: 1989  
RELEVANT RESIDUES IN SEQ ID NO: 1: FROM 1 TO 2347  
PCT-US96-03965-1

Query Match 99.2%; Score 2330.8; DB 5; Length 2347;

Best Local Similarity 99.8%; Pred. No. 0;  
Matches 2345; Conservative 0; Mismatches 2; Indels 3; Gaps 1;

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Qy 61 ctacaccagaaaaggacacattcgacaacaggaagagcgctgtcacagaaaaccacag 120
Db 61 ctacaccagaaaaggacacattcgacaacaggaagagcgctgtcacagaaaaccacag 120
Qy 121 tgtctgtgcatgtgacatttgcatttgcatttgcatttgcatttgcatttgcatttgc 180
Db 121 tgtctgtgcatgtgacatttgcatttgcatttgcatttgcatttgcatttgcatttgc 180
Qy 181 gctgctgctagtgagtgagtgagtgagtgagtgagtgagtgagtgagtgagtgag 240
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Db 301 ctccagcatagtgagtgagtgagtgagtgagtgagtgagtgagtgagtgagtgag 360
Qy 361 gttcaagaagtgttgcctctaccacacacacacacacacacacacacacacacacac 420
Db 361 gttcaagaagtgttgcctctaccacacacacacacacacacacacacacacacacac 420
Qy 421 ttgcttggggccacagtgaccagatgtgaaaggagtgagtgagtgagtgagtgagtgag 480
Db 421 ttgcttggggccacagtgaccagatgtgaaaggagtgagtgagtgagtgagtgagtgag 480
Qy 481 gaagcaggttgcacaaactgtagcttgggaacatttaataatgacacagacagtgagtgag 540
Db 481 gaagcaggttgcacaaactgtagcttgggaacatttaataatgacacagacagtgagtgag 540
Qy 541 ctgtcgaacctggacgaactgctctctagacgaagtgctgtctaaagcgggacac 600
Db 541 ctgtcgaacctggacgaactgctctctagacgaagtgctgtctaaagcgggacac 600
Qy 601 ggaggaagcgtgtgtgtggacccctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 660
Db 601 ggaggaagcgtgtgtgtggacccctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 660
Qy 720 ttttccggaataatcctttccctgttgcacactccacccctgtgacactgtgtgtgtgtgtgt 1800
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; IMMEDIATE SOURCE:
; LIBRARY: cDNA library
; CLONE:
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT:
; MAP POSITION:
; UNITS:
; FEATURE:
; NAME/KEY: H4-1BB
; LOCATION:
; IDENTIFICATION METHOD: Similarity to mouse 4-1BB and other
; IDENTIFICATION METHOD: members of NGFR superfamily
; OTHER INFORMATION:
; PUBLICATION INFORMATION:
; AUTHORS: Kwon, B.S., and Weissman, S.M.
; TITLE: cDNA sequences of two inducible T-cell genes
; JOURNAL: Proc. Natl. Acad. Sci. USA
; VOLUME: 86
; ISSUE:
; PAGES: 1963-1967
; RELEVANT RESIDUES IN SEQ ID NO: all
;
; PCT-US94-10457-1

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? IDENTIFICATION METHOD: MEMBERS OF NGFR SUPERFAMILY
? OTHER INFORMATION:
? PUBLICATION INFORMATION:
? AUTHORS: KWON, B.S., and WEISSMAN, S.M.
? TITLE: cDNA SEQUENCES OF TWO INDUCIBLE T-CELL GENES
? JOURNAL: PROC. NATL. ACAD. SCI. USA
? VOLUME: 86
? ISSUE:
? PAGES: 1963-1967
? RELEVANT RESIDUES IN SEQ ID NO: all
? PCT-US94-10457-1

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	Query Match	14.4%	Score 339.2	DB 5	Length 838
	Best Local Similarity	67.8%	Pred. No. 8.5e-95		
	Matches 537	Conservative	0	Mismatches 243	Indels 12
	Gaps				
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Db	491	ACCAAGGAGGAGGACGTGTCTGTGGACCATCTCCAGCTGACCTCTCTCCGGGAGCATCC	550
QY	653	ACCATTCTGTGACTCCAGAGGAGGACGAGGAGGCACTCCTTGCAAGTCTCTTCACTCTG	712
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QY	713	TTCCTGGCGCTGACATCG---GCTTGTGTGTGGCCCTGATCTTAACTACTCTCTGTTCC	769
Db	611	TTTCTTTCGGGTGACGTGCACTGGCTGTGCTCTTCTCTCTCTCTCCAGCTCCGTTTTC	670
QY	770	TCTGTCTCAATGGATCAGGAAAAAATTCCTCCACATATTCACCAACCTTTTAAAGAG	829

Qy	1801	tcaatccttgccgcgaaggttcagttggtaccctgtctaaggcgggagacagaccgc	1860
Db	1798	TCAATCCTTCCGCGCGAAAGGTGAGTTGTTACCGCTCTGTAGGGCGGGAGACAGACCGC	1857
Qy	1861	ggggagctcacagaatacgactcacaggcgccccggccttcgaaatgaaccttittta	1920
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Qy	1921	atctcacaaagtctcgccgggctcgqcgagacctatggcgctcgactcttatctactcatcc	1980
Db	1918	ATCTCACAGTTTCTGTCGGGCTCGCGGACCTATGGCGTCGATCCTTTATTACCTTATCC	1977
Qy	1981	tggcgccaagaataaacacaacaaagccctgactccggtactaatctccctgccggccc	2040
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Qy	2101	cttctgaaccggttcttacaaaagtaattagttcttgtcttcagcctccaaagcttctgc	2160
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Qy	2161	tagctatggcagcatcaaggctgggtatttgcacggtcagcgtcagcgccgcgaata	2220
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Db	2218	AGGGTACTGGGCGGCCGCTCGAAGGCCCTTTGGTTTCAGAAACCACAAAGGCCCCCTCATAT	2277
Qy	2281	ccaacgttccgacttgccttcctgcgcgtacgtggtagtggtggccttagctcttcttcg	2340
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Qy	2341	atatagttagac	2350
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## RESULT 2

US-08-236-918A-5  
; Sequence 5, Application US/08236918A  
; Patent No. 5674704  
; GENERAL INFORMATION:  
; APPLICANT: Alderson, Mark R.  
; APPLICANT: Goodwin, Raymond G.  
; APPLICANT: Smith, Craig A.  
; TITLE OF INVENTION: Cytokine Designated 4-LBB Ligand  
; NUMBER OF SEQUENCES: 18  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Kathryn A. Anderson, Immunex Corporation  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: Washington  
; COUNTRY: US  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple 7.5.3  
; SOFTWARE: Microsoft word, Version #6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/236,918A  
; FILING DATE: 06-May-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,843  
; FILING DATE: 07-May-1993  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Anderson, Kathryn A.

Db 671 TCTGTTGTTAAACGGGCGAAGAAACCTCTGTATATATTCAAAACCACTTATGAGA 730  
QY 830 accactggagcagctcaagagaagagctgttagctgctgagtgctccacaggaagaaga 889  
Db 731 CCAGTACAACTACTCAAGAGGAGATGCTGTAGCTGCCGATTTCAGAGAGAAGAA 790  
QY 890 ggaggagagga 901  
Db 791 GGAGGATGTGAA 802

## RESULT 4

PCT-US96-03965-7  
; Sequence 7, Application PC/TUS9603965  
; GENERAL INFORMATION:  
; APPLICANT: Kwon, Byoung Se  
; APPLICANT: Kang, Chang-Yul  
; TITLE OF INVENTION: Monoclonal antibody against human  
; TITLE OF INVENTION: receptor 4-1BB  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Barnard, Brown & Michaels  
; STREET: 306 East State Street, Suite 220  
; CITY: Ithaca  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 14850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US96/03965  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/122,796  
; FILING DATE: 16-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/012,269  
; FILING DATE: 01-FEB-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/922,996  
; FILING DATE: 30-JUL-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/267,577  
; FILING DATE: 07-NOV-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Michaels, Christopher A  
; REGISTRATION NUMBER: 34,390  
; REFERENCE/DOCKET NUMBER: KWO5  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 607-273-1711  
; TELEFAX: 607-273-2609  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 838 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA to mRNA  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; ORIGINAL SOURCE:  
; ORGANISM: Homo sapiens  
; INDIVIDUAL ISOLATE: H4-1BB #1  
; DEVELOPMENTAL STAGE: Differentiated T-cell  
; CELL TYPE: Lymphocyte  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 41..805

; OTHER INFORMATION: /codon\_start= 41  
; OTHER INFORMATION: /product= "H4-1BB"  
; OTHER INFORMATION: /number= 1  
; FEATURE:  
; NAME/KEY: mat\_peptide  
; LOCATION: 41..802  
; OTHER INFORMATION: /codon\_start= 41  
; OTHER INFORMATION: /product= "H4-1BB"  
; OTHER INFORMATION: /number= 1  
; PCT-US96-03965-7

Query Match 14.4%; Score 339.2; DB 5; Length 838;  
Best Local Similarity 67.8%; Pred. No. 8.5e-95;  
Matches 537; Conservative 0; Mismatches 243; Indels 12; Gaps 4;

QY 119 agtgcctctgcatgtgacatttcgccatgggaacactgttacaacgtgtgtgctatt 178  
Db 14 AGTATCATACCTGTGCCAGATTTCATCATGGGAACACAGCTGTTACACATAGTAGCCACT 73  
QY 179 gtgcctgctgtagtgggctgtgagaagtgggagccgtgcagaaactcctctgataactgt 238  
Db 74 CTGTTGCTGCTCAACTTTGAGAGGACACAGATCATTTGCAGGATCCTTGTAGTAAGTGC 133  
QY 239 cagcctgtactcttcgcagaaatac---aatccagtcctcgaagagctgcccctccaagt 295  
Db 134 CCAGCTGGTACTCTCTGTGATAATAACAGGAATCAGATTTTCAGTCCCTGCTCCCAAT 193  
QY 296 accttcaccagatagtgacagccgaactgttaacatctcagagtgctgtaggctat 355  
Db 194 AGTTTCTCCAGCGCAGGTGGCAAAAGGACCTGTGACATATCAGGCAGTGTAAAGGTGTT 253  
QY 356 ttccaggttcaagaagtttgcctctaccacacacgcggagtgtagtgatgattgaaga 415  
Db 254 TTCAGGACACAGGAGGAGTGTCTCTCCACCAGCAATGCAGAGTGTGACGTCCACGG 313  
QY 416 ttccattgttgggccacagtgccacagatgtgaaaggactgcagagcctgcccagag 475  
Db 314 TTTCACTGCTGGGGCAGGATGCAGCATGTGTGAACAGGATTGTAAACAAGTCAAGAA 373  
QY 476 ctaacgaagcaggttgcacaaacctagcttgggaacatttaacgacacgaacgggtact 535  
Db 374 CTGACAAAAAAGGTTGTAAGACTGTTCCTGGGACATTTACGATCAGAAACG---T 430  
QY 536 gggtctgtgcacctggacgaactgctctcagacgaagtgctgtcttaagaccggg 595  
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QY 596 accacggagaagcagtggtgtgtggaccocctgtgtgagcttctctcccag---tacc 652  
Db 491 ACGAAGGAGAGGAGGAGTGTGTGGACCATCTCCAGCTGACCTCTCTCCGGGAGCATCC 550  
QY 653 accatttctgactccagagggagagcagggagggagcactcctgcaggttcttaccttg 712  
Db 551 TCTGTGACCCCGCTGCCCTCGGAGAGAGCCAGGACACTCTCCGCGAGATCATCTCCCTC 610  
QY 713 ttctggcgtgacatcg---gctttgtgctggtgcccctgactcttacttactctctgttc 769  
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QY 770 tctgtgtcacaatggatcaggaaaaaattccccacacatatcccaagcaaccttaagaag 829  
Db 671 TCTGTTGTTAAACGGGCGAAGAAACCTCCTGTATATATTCAAAACCAACCATTTATGAGA 730  
QY 830 accactggagcagctcaagaggaagagctgttagctgcccagtgctccacaggaagaaga 889  
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RESULT      5
US-08-236-918A-7
: Sequence 7, Application US/08236918A
: Patent No. 5674704
: GENERAL INFORMATION:
: APPLICANT: Alderson, Mark R.
: APPLICANT: Goodwin, Raymond G.
: APPLICANT: Smith, Craig A.
: TITLE OF INVENTION: Cytokine Designated 4-1BB Ligand
: NUMBER OF SEQUENCES: 18
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Kathryn A. Anderson, Immunex Corporation
: STREET: 51 University Street
: CITY: Seattle
: STATE: Washington
: COUNTRY: US
: ZIP: 98101
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: Apple Power Macintosh
: OPERATING SYSTEM: Apple 7.5.3
: SOFTWARE: Microsoft Word, Version #6.0.1
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/236,918A
: FILING DATE: 06-May-1994
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/060,843
: FILING DATE: 07-May-1993
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Anderson, Kathryn A.
: REGISTRATION NUMBER: 32,172
: REFERENCE/DOCKET NUMBER: 2801-B
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (206) 587-0430
: TELEFAX: (206) 233-0644
: INFORMATION FOR SEQ ID NO: 7:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 1415 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: cDNA to mRNA
: HYPOTHETICAL: NO
: ANTI-SENSE: NO
: IMMEDIATE SOURCE:
: CLONE: ru4-1BB
: FEATURE:
: NAME/KEY: CDS
: LOCATION: 120..887
: FEATURE:
: NAME/KEY: mat_peptide
: LOCATION: 189..884
: FEATURE:
: NAME/KEY: sig_peptide
: LOCATION: 120..188
: US-08-236-918A-7

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Query Match	14.4%	Score 339.2;	DB 1;	Length 1415;
Best Local Similarity	67.8%;	Pred. No. 1.2e-94;		
Matches 537; Conservative	0;	Mismatches 243;	Indels 12;	Gaps 4;

  

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QY	179	gtactcgtcgtagtggcgcttgtgaaagggtggagccctgcagaacctcgtgtgaatacgt	238
Db	153	CTGTTGTGTCCTCAACTTTGAGAGGACAAAGATCANTTGCAGGATCCCTTTGTAGTAACATGC	212
QY	239	cagcctgtgactttctgcagaaaataac---aatccagtctgcagaagctgcctcccagaqt	295

Db	213	CCAGCTGGTACATCTCTGTGATAATAACAGGAATTCAGATTGTCAGTCCCTCTGCTCCCAAT	272
Qy	296	acctctccagcagatgtagcagcgaactgtaaactgtgaagatgtgtgcagcgtat	355
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Qy	476	ctaacaagcagggttgcaaaacctagtcttggaacatttaattacacagaacggtact	535
Db	453	CTGACAAAAGAGTGTGAAGAGCTGTGTCTTTGGGACATTTTAACGATCAGAAACG	509
Qy	536	ggcgtctgcagccctggacgaactctctctagacggaaggtctgtgcttaagaccggg	595
Db	510	GGCATCTGTCACCTGGACAACTGTCTTTGGATGGAAAGTCTGTGCTTGTGAATGGG	569
Qy	596	accacggaggaagcgtggtgtgtgtgacccctgtgtgagcttctctcccag---	652
Db	570	ACGAAGGAGAGGACGTGGTCTGTGGACCATCTCCAGCCGACCTCTCTCCGGGAGCATCC	629
Qy	653	accatttctgtactccagaggagaccagaggagggcactccttcagggtccttaccctg	712
Db	630	TCGTGTGACCCGGCTCGCCCTCGAGAGAGCCAGSACATCTCCGCAGATCATCTCTTC	689
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Db	690	TTTCTTGGCTGACGTGCAGCTGGCTTGCCTTCCCTGCTGTCTTCTCTCAGCTCCGTTTC	749
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Db	750	TCGTGTTTAAACGGGCGCAAGAAAGAACTCCTGTATATATTCAACAACCATTTATGAGA	809
Qy	830	accactggagcagctcaagaaggagaigtctgttagctgcgatgtccacagagaagaaga	889
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Db	870	GGAGGATGTGAA_881	
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: Sequence 1, Application US/08816605			
: Patent No. 5874240			
: GENERAL INFORMATION:			
: APPLICANT: Ni, Jian			
: APPLICANT: Yu, Guo-Liang			
: APPLICANT: Gentz, Reiner			
: TITLE OF INVENTION: Human 4-IBB receptor Splicing Variant			
: NUMBER OF SEQUENCES: 9			
: CORRESPONDENCE ADDRESS:			
: ADDRESSEE: Human Genome Sciences, Inc.			
: STREET: 9410 Key West Avenue			
: CITY: Rockville			
: STATE: MD			
: COUNTRY: USA			
: ZIP: 20850			
: COMPUTER READABLE FORM:			
: MEDIUM TYPE: Floppy disk			
: COMPUTER: IBM PC compatible			
: OPERATING SYSTEM: PC-DOS/MS-DOS			
: SOFTWARE: PatentIn Release #1.0, Version #1.30			
: CURRENT APPLICATION DATA:			
: APPLICATION NUMBER: US/08/816,605			
: FILING DATE: 13-MAR-1997			

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RESULT      6
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: Sequence 1, Application US/08816605
: Patent No. 5874240
: GENERAL INFORMATION:
:   APPLICANT: NI, Jian
:   APPLICANT: Yu, Guo-Liang
:   APPLICANT: Gentz, Reiner
:   TITLE OF INVENTION: Human 4-IBB Receptor Splicing Variant
:   NUMBER OF SEQUENCES: 9
:   CORRESPONDENCE ADDRESS:
:     ADDRESSEE: Human Genome Sciences, Inc.
:     STREET: 9410 Key West Avenue
:     CITY: Rockville
:     STATE: MD
:     COUNTRY: USA
:     ZIP: 20850
: COMPUTER READABLE FORM:
:   MEDIUM TYPE: Floppy disk
:   COMPUTER: IBM PC compatible
:   OPERATING SYSTEM: PC-DOS/MS-DOS
:   SOFTWARE: PatentIn Release #1.0, Version #1.30
:   CURRENT APPLICATION DATA:
:     APPLICATION NUMBER: US/08/816,605
:     FILING DATE: 13-MAR-1997

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; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Brookes, A. Anders
; REGISTRATION NUMBER: 36,373
; REFERENCE/DOCKET NUMBER: PF254
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 301-309-8504
; TELEFAX: 301-309-8512
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 946 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 124..780
; FEATURE:
; NAME/KEY: sig_peptide
; LOCATION: 124..177
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 178..780
;
US-08-816-605-1

Query Match 10.5%; Score 245.8; DB 2; Length 946;
Best Local Similarity 68.6%; Pred. No. 6.8e-66;
Matches 385; Conservative 0; Mismatches 167; Indels 9; Gaps 3;

Qy 347 gcaggctattcaggttcgaagaagtttgctctctaccacaacgcgagtggtgagtc 406
Db 220 GCTGTGTTTTCAGGACCAAGGAGGAGTTCCTCCACCAGCAATGCAGAGTGTGACTGC 279

Qy 407 attgaagattccattgcttggggccacagtcgaccagatgtgaaaggactgcaggcct 466
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Qy 467 ggcaggagctaacgaagcaggttgcaaaccttagcttggtggaacatttaataagcag 526
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Qy 527 aacgtactggtctgtgcacctggacgaactgctctctagacggaaggtctgtgct 586
Db 400 AAACG---TGGCATCTGTCGACCCCTGGACAAACTGTTCTTTGGATGGAAGTCTGTGCTT 456

Qy 587 aagaccgggaccaggaagagcgtgtgtgtgtgacccccctgtgtgagcttctctccc 646
Db 457 GTGAATGGGACGAAGAGGAGGACGTGTCTGTGGACCATCTTCAGCCGACCTCTCCG 516

Qy 647 agtaccaccatt---tctgtgactccagagggagaccagagggcactccttgcaggtc 703
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Qy 704 cttaactgttctctgctgcgtgacatcg---gcttgtgctggtgcccctgattcttact 760
Db 577 ATCTCTCTTCTTCTGTGCGCTGACGTCGACTGCTGCTCTCTCTCTCTCTCTCTCAG 636

Qy 761 ctctgttctctgtgctcaaatggttcagggaataatccccacatatttcgaagcaaca 820
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Qy 881 gaagaagaagagagagagga 901
Db 757 GAAGAAGAAGGAGGATGTGAA 777
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RESULT 7

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US-08-687-080-101
; Sequence 101, Application US/08687080
; Patent No. 5965427
; GENERAL INFORMATION:
; APPLICANT: Gregory Dolganov
; TITLE OF INVENTION: Human RAD50 Gene and Methods of Use Thereof
; NUMBER OF SEQUENCES: 175
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: 350 Cambridge Avenue, Suite 250
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/687,080
; FILING DATE: 17-JUL-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/592,126
; FILING DATE: 26-JAN-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Sholtz, Charles K.
; REGISTRATION NUMBER: 38,615
; REFERENCE/DOCKET NUMBER: 4600-0111.30
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 324-0880
; TELEFAX: (415) 324-0960
; INFORMATION FOR SEQ ID NO: 101:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5543 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; INDIVIDUAL ISOLATE: 3' END OF INTRON 19 OF RAD50 GENOMIC
; INDIVIDUAL ISOLATE: SEQUENCE
;
US-08-687-080-101

Query Match 2.2%; Score 51.8; DB 2; Length 5543;
Best Local Similarity 68.9%; Pred. No. 2e-05;
Matches 71; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

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Db 1658 ATGGCCATCAACTGATGATCAGATAACAAATGTGTATACCCATACAAATGGAATATTA 1717

Qy 61 ctacaccaggaaggaagcacattccacacaggaagagagcct 103
Db 1718 TTCAGCCATAAAGGATACATGCTACCACATGAATGAACCT 1760

RESULT 8
US-08-920-422-17/c
; Sequence 17, Application US/08920422A
; Patent No. 6255473
; GENERAL INFORMATION:
; APPLICANT: Vitek, Michael P.
; APPLICANT: Mitsuda, No. 6255473iaki
; APPLICANT: Roses, Allen D.
; TITLE OF INVENTION: Presenilin-1 Gene Promoter
; FILE REFERENCE: VITEKPRESNILIN
; CURRENT APPLICATION NUMBER: US/08/920,422A
; CURRENT FILING DATE: 1997-08-29
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GenCore version 4.5  
Copyright (c) 1993 - 2000 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: September 10, 2001, 18:00:17 ; Search time 85.08 Seconds  
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433.894 Million cell updates/sec

Title: US-08-012-269A-1\_COPY\_661\_855

Perfect score: 195

Sequence: 1 tgtgactccagaggaggac.....ggagcagctcaagaggagaaga 195

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 324599 seqs, 94655562 residues

Total number of hits satisfying chosen parameters: 649198

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents\_NA.\*  
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2: /cgn2\_6/ptodata/1/ina/5B\_COMB.seq.\*  
3: /cgn2\_6/ptodata/1/ina/6A\_COMB.seq.\*  
4: /cgn2\_6/ptodata/1/ina/6B\_COMB.seq.\*  
5: /cgn2\_6/ptodata/1/ina/PCTUS\_COMB.seq.\*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	195	100.0	768	1	US-08-236-918A-5
2	195	100.0	2347	5	PCT-US96-03965-1
3	74.8	38.4	838	5	PCT-US94-10457-1
4	74.8	38.4	838	5	PCT-US96-03965-7
5	74.8	38.4	946	2	US-08-816-605-1
6	74.8	38.4	1415	1	US-08-236-918A-7
7	30.2	15.5	4741	1	US-07-695-4728-4
8	30.2	15.5	4742	1	US-08-250-740-35
9	30	15.4	218	1	US-08-686-878A-15
10	29.4	15.1	7218	1	US-08-232-463-14
11	29.2	15.0	1181	3	PCT-US92-493-1
12	29	14.9	490	5	PCT-US91-01750-4
13	29	14.9	4325	1	US-08-453-924-2
14	29	14.9	4325	1	US-08-471-791-29
15	29	14.9	4325	5	PCT-US91-01746-29
16	28.6	14.7	2344	1	US-07-695-4728-35
17	28.6	14.7	2347	1	US-08-250-740-32
18	28.6	14.7	2347	1	US-07-695-4728-1
19	28.6	14.7	2347	1	US-07-695-4728-34
20	28.6	14.7	2347	1	US-07-695-4728-36
21	28.4	14.6	1355	3	US-08-415-655-14
22	27.4	14.1	1884	3	US-08-753-007A-5
23	27.4	14.1	1884	3	US-09-398-496-5
24	27.2	13.9	3380	2	US-09-156-425-1
25	27.2	13.9	4707	3	US-09-181-706-1
26	27.2	13.9	4707	4	US-09-458-791-1
27	27.2	13.9	4707	4	US-09-459-066-1

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C 29 27.2 13.9 6306 1 US-08-470-950-3 Sequence 3, Appli  
C 30 27.2 13.9 6306 1 US-08-467-781-3 Sequence 3, Appli  
C 31 27.2 13.9 6306 1 US-08-195-487-3 Sequence 3, Appli  
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C 34 27 13.8 1048 4 US-08-195-967-3 Sequence 3, Appli  
C 35 26.8 13.7 1640 1 US-08-068-945A-32 Sequence 32, Appli  
C 36 26.8 13.7 1640 1 US-08-442-806-32 Sequence 32, Appli  
C 37 26.8 13.7 2720 2 US-08-007-107-3 Sequence 3, Appli  
C 38 26.8 13.7 11531 1 US-08-068-945A-1 Sequence 1, Appli  
C 39 26.8 13.7 11531 1 US-08-442-806-1 Sequence 1, Appli  
C 40 26.8 13.7 31571 1 US-08-323-443B-1 Sequence 1, Appli  
C 41 26.8 13.7 53526 3 US-08-658-136-2 Sequence 2, Appli  
C 42 26.8 13.7 53577 3 US-08-658-136-1 Sequence 1, Appli  
C 43 26.6 13.6 4800 5 PCT-US94-07779-1 Sequence 1, Appli  
C 44 26.6 13.6 5433 3 US-08-929-329-1 Sequence 1, Appli  
C 45 26.2 13.4 839 4 US-09-276-531-110 Sequence 110, App

## ALIGNMENTS

RESULT 1  
US-08-236-918A-5  
; Sequence 5, Application US/08236918A  
; Patent No. 5674704  
; GENERAL INFORMATION:  
; APPLICANT: Alderson, Mark R.  
; APPLICANT: Goodwin, Raymond G.  
; APPLICANT: Smith, Craig A.  
; TITLE OF INVENTION: Cytokine Designated 4-1BB Ligand  
; NUMBER OF SEQUENCES: 18  
; CORRESPONDENCE ADDRESSES:  
; ADDRESSEE: Kathryn A. Anderson, Immunex Corporation  
; STREET: 51 University Street  
; CITY: Seattle  
; STATE: Washington  
; COUNTRY: US  
; ZIP: 98101  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: Apple Power Macintosh  
; OPERATING SYSTEM: Apple 7.5.3  
; SOFTWARE: Microsoft Word, Version #6.0.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/236,918A  
; FILING DATE: 06-May-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/060,843  
; FILING DATE: 07-May-1993  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Anderson, Kathryn A.  
; REGISTRATION NUMBER: 32,172  
; REFERENCE/DOCKET NUMBER: 2801-B  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (206) 587-0430  
; TELEFAX: (206) 233-0644  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 768 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA to mRNA  
; HYPOTHEetical: NO  
; ANTI-SENSE: NO  
; IMMEDIATE SOURCE:  
; CLONE: mu4-1BB  
; FEATURE:  
; NAME/KEY: CDS

;; FILING DATE:  
;; CLASSIFICATION:  
;; PRIOR APPLICATION DATA: 08/012,269  
;; FILING DATE: 2/1/93  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/922,996  
;; FILING DATE: 7/30/92  
;; PRIOR APPLICATION DATA:  
;; APPLICATION NUMBER: 07/267,577  
;; FILING DATE: 11/7/88  
;; ATTORNEY/AGENT INFORMATION:  
;; NAME: Michaels, Christopher A.  
;; REGISTRATION NUMBER: 34,390  
;; REFERENCE/DOCKET NUMBER: kwnh41bb  
;; TELECOMMUNICATION INFORMATION:  
;; TELEPHONE: 607-273-1711  
;; TELEFAX: 607-273-2609  
;;  
;; INFORMATION FOR SEQ ID NO: 1 :  
;; SEQUENCE CHARACTERISTICS:  
;; LENGTH: 838  
;; TYPE: nucleic acid  
;; STRANDEDNESS: double stranded  
;; TOPOLOGY: linear  
;; MOLECULE TYPE: cDNA to mRNA  
;; HYPOTHETICAL: NO  
;; ANTI-SENSE: NO  
;; FRAGMENT TYPE: n/a  
;; ORIGINAL SOURCE:  
;; ORGANISM: Human  
;; STRAIN:  
;; INDIVIDUAL ISOLATE: H4-1BB #1  
;; DEVELOPMENTAL STAGE: Differentiated T-cell  
;; HAPLOTYPE:  
;; TISSUE TYPE: Lymphocytes  
;; CELL TYPE: Lymphocytes  
;; CELL LINE:  
;; ORGANELLE:  
;; IMMEDIATE SOURCE:  
;; LIBRARY: cDNA library  
;; CLONE:  
;; POSITION IN GENOME:  
;; CHROMOSOME/SEGMENT:  
;; MAP POSITION:  
;; UNITS:  
;; FEATURE:  
;; NAME/KEY: H4-1BB  
;; LOCATION:  
;; IDENTIFICATION METHOD: Similarity to mouse 4-1BB and other  
;; IDENTIFICATION METHOD: members of NGFR superfamily  
;; OTHER INFORMATION:  
;; PUBLICATION INFORMATION:  
;; AUTHORS: Kwon, B.S., and Weissman, S.M.  
;; TITLE: cDNA sequences of two inducible T-cell genes  
;; JOURNAL: Proc. Natl. Acad. Sci. USA  
;; VOLUME: 86  
;; ISSUE:  
;; PAGES: 1963-1967  
;; RELEVANT RESIDUES IN SEQ ID NO: all  
PCT-US94-10457-1

Query Match 38.4%; Score 74.8; DB 5; Length 838;  
Best Local Similarity 68.4%; Pred. No. 7.4e-16;  
Matches 119; Conservative 0; Mismatches 52; Indels 3; Gaps 1;  
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Qy 85 cctga---tcttcattactctgtctgtctcaatggatcaggaaaaattccc 141  
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Db 643 CCTGCTGTTCTCTCACGCTCCGTTTTCTGTGTTTAAACGGGGCAGAAAGAACTCCT 702  
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Db 703 GTATATATTCAACACACCATTTATGAGACCCAGTACAAACTACTCAAGAGGAAGA 756  
RESULT 4  
PCT-US96-03965-7  
; Sequence 7, Application PC/TUS9603965  
; GENERAL INFORMATION:  
; APPLICANT: Kwon, Byoung Se  
; APPLICANT: Kang, Chang-Yuul  
; TITLE OF INVENTION: Monoclonal antibody against human  
; TITLE OF INVENTION: receptor 4-1BB  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnard, Brown & Michaels  
; STREET: 306 East State Street, Suite 220  
; CITY: Ithaca  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 14850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US96/03965  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/122,796  
; FILING DATE: 16-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/012,269  
; FILING DATE: 01-FEB-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/922,996  
; FILING DATE: 30-JUL-1992  
; PRIOR APPLICATION DATA: US 07/267,577  
; APPLICATION NUMBER: 07-NOV-1988  
; FILING DATE: 07-NOV-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Michaels, Christopher A  
; REGISTRATION NUMBER: 34,390  
; REFERENCE/DOCKET NUMBER: KW05  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 607-273-1711  
; TELEFAX: 607-273-2609  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 838 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA to mRNA  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; ORIGINAL SOURCE:  
; ORGANISM: Homo sapiens  
; INDIVIDUAL ISOLATE: H4-1BB #1  
; DEVELOPMENTAL STAGE: Differentiated T-cell  
; CELL TYPE: Lymphocyte  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 41..805 /codon\_start= 41  
; OTHER INFORMATION: /product= "H4-1BB"  
; OTHER INFORMATION: /number= 1  
; FEATURE:  
; NAME/KEY: mat\_peptide

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Qy	101	ctctgttctctgtctcaaatgatcaggaaaaaattccccacacatatccaagcaacca	160
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Qy	42	tcttaacctgttctctggcgctgacacatccgctctttgcgcgtggccct-gatcttcataact	418
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42 cccttacccttgcctccctggcgcgcacatccgctcttgcctgcctggccct-gatcttcattact 100



APPLICATION NUMBER: 07/567,373  
FILING DATE: 13-AUG-1990  
APPLICATION NUMBER: 07/494,106  
FILING DATE: 16-MAR-1990  
ATTORNEY/AGENT INFORMATION:  
NAME: Lassen, Elizabeth  
REGISTRATION NUMBER: 31,845  
NAME: Donna E. Scherer  
REGISTRATION NUMBER: 34,719  
REFERENCE/DOCKET NUMBER: CGNE 69-3 WO  
TELEPHONE: (916) 753-6313  
TELEFAX: (916) 753-1510  
TELEX: 350370 CGNE  
INFORMATION FOR SEQ ID NO: 29:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4325 base pairs  
TYPE: NUCLEIC ACID  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: genomic DNA  
PCT-US91-01746-29

Query Match 14.9%; Score 29; DB 5; Length 4325;  
Best Local Similarity 57.0%; Pred. No. 4.1;  
Matches 53; Conservative 0; Mismatches 40; Indels 0; Gaps 0;  
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Db 2483 TGGAGCTCGTTGACAGCTGCTGGAGCAGCGGTGGCTGCTGGGGCCCTGTGTGG 2424  
Qy 96 ttactctctgttctctgtgctcaaatggatca 128  
Db 2423 TTCTCCAGCTGCTCTTCAAAATCAAACTCACCA 2391

Search completed: September 10, 2001, 18:00:22  
Job time: 8375 sec



GenCore version 4.5  
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: September 10, 2001, 18:00:22 ; Search time 85.08 seconds  
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609.676 Million cell updates/sec

Title: US-08-012-269a-1\_COPY\_1284\_1557

Perfect score: 274  
Sequence: 1 tattttaacgtactgtata.....acgtactgtattcgtattc 274

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 324599 seqs, 94655562 residues

Total number of hits satisfying chosen parameters: 649198

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued\_Patents\_NA.\*  
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2: /cgn2\_6/ptodata/1/ina/5B-COMB.seq.\*  
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4: /cgn2\_6/ptodata/1/ina/6B-COMB.seq.\*  
5: /cgn2\_6/ptodata/1/ina/PCTUS-COMB.seq.\*  
6: /cgn2\_6/ptodata/1/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	272.4	99.4	2347	5	PCT-US96-03965-1
2	38.6	14.1	5053	2	US-08-685-576-2
3	38	13.9	8920	2	US-08-446-855A-1
4	38	13.9	8920	4	US-09-150-741-1
5	38	13.9	43676	3	US-09-356-952-12
6	37.4	13.6	3681	1	US-08-571-759-3
7	37.4	13.6	3681	1	US-08-909-984A-3
8	37.4	13.6	3681	1	US-08-909-983-3
9	36.8	13.4	19557	5	PCT-US92-06300-1
10	36.4	13.3	221	1	US-08-222-177A-17
11	36.2	13.2	240	1	US-08-222-177A-32
12	36.2	13.2	870	2	US-08-420-629-9
13	36	13.1	605	1	US-08-599-252-89
14	36	13.1	605	5	PCT-US96-06352-89
15	36	13.1	605	5	PCT-US96-06583-89
16	35.8	13.1	17949	4	US-09-087-465-3
17	35.6	13.0	7970	1	US-08-135-511-31
18	35.6	13.0	7997	1	US-08-187-453-31
19	35.6	13.0	7997	1	US-08-562-985A-7
20	35.4	12.9	200	1	US-08-222-177A-38
21	35.4	12.9	230	1	US-08-222-177A-16
22	35.4	12.9	243	1	US-08-222-177A-40
23	35.4	12.9	1482	1	US-08-393-985-13
24	35.4	12.9	51952	3	US-08-947-823-1
25	35.2	12.8	258	1	US-07-711-615A-1
26	35.2	12.8	258	5	PCT-US92-04833-1
27	35.2	12.8	780	1	US-08-439-962-1

28 35.2 12.8 780 2 US-08-497-535-1 Sequence 1, Appli  
29 35.2 12.8 780 2 US-09-098-317-1 Sequence 1, Appli  
30 35.2 12.8 780 4 US-09-323-555B-1 Sequence 1, Appli  
31 35.2 12.8 780 5 PCT-US96-06666-1 Sequence 1, Appli  
32 35 12.8 2746 2 US-08-576-165-3 Sequence 3, Appli  
33 34.8 12.7 1906 1 US-08-207-904-18 Sequence 18, Appli  
34 34.8 12.7 10409 3 US-08-772-440-33 Sequence 33, Appli  
35 34.8 12.7 87350 3 US-08-781-891-79 Sequence 79, Appli  
36 34.6 12.6 4718 3 US-08-936-135-9 Sequence 9, Appli  
37 34.6 12.6 4733 3 US-08-936-135-11 Sequence 11, Appli  
38 34.6 12.6 4769 3 US-08-936-135-13 Sequence 13, Appli  
39 34.6 12.6 4784 3 US-08-936-135-15 Sequence 15, Appli  
40 34.4 12.6 293 1 US-08-222-177A-49 Sequence 49, Appli  
41 34.4 12.6 2347 5 PCT-US96-03965-1 Sequence 1, Appli  
42 34.4 12.6 8920 2 US-08-446-855A-1 Sequence 11, Appli  
43 34.4 12.6 8920 4 US-09-150-741-1 Sequence 1, Appli  
44 34.4 12.6 43795 3 US-08-742-185-101 Sequence 101, App  
45 34.2 12.5 387 3 US-09-157-177-135 Sequence 135, App

## ALIGNMENTS

RESULT 1  
PCT-US96-03965-1  
; Sequence 1, Application PC/TUS9603965  
; GENERAL INFORMATION:  
; APPLICANT: Kwon, Byoung Se  
; APPLICANT: Kang, Chang-Yuill  
; TITLE OF INVENTION: Monoclonal antibody against human  
; TITLE OF INVENTION: receptor 4-LBB  
; NUMBER OF SEQUENCES: 10  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Barnard, Brown & Michaels  
; STREET: 306 East State Street, Suite 220  
; CITY: Ithaca  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 14850  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: PCT/US96/03965  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/122,796  
; FILING DATE: 16-SEP-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/012,269  
; FILING DATE: 01-FEB-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/922,996  
; FILING DATE: 30-JUL-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/267,577  
; FILING DATE: 07-NOV-1988  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Michaels, Christopher A  
; REGISTRATION NUMBER: 34,390  
; REFERENCE/DOCKET NUMBER: KW05  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 607-273-1711  
; TELEFAX: 607-273-2609  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 2347 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear

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: Sequence 12, Application US/09356952
: Patent No. 6117663
: GENERAL INFORMATION:
: APPLICANT: Borlack-Sjodin, Ann
: APPLICANT: Margarit, S. M.
: APPLICANT: Bor-Sogi, Dafna
: APPLICANT: Cole, Philip
: APPLICANT: Kuriyan, John
: TITLE OF INVENTION: A CRYSTAL OF A RAS-SOS COMPLEX AND METHODS OF USE
: TITLE OF INVENTION: THEREOF
: FILE REFERENCE: 600-1-228N
: CURRENT APPLICATION NUMBER: US/09/356,952
: CURRENT FILING DATE: 1999-07-19
: EARLIER APPLICATION NUMBER: 60/093,631
: EARLIER FILING DATE: 1998-07-21
: NUMBER OF SEQ ID NOS: 14
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 12
: LENGTH: 43676
: TYPE: DNA
: ORGANISM: Saccharomyces cerevisiae
: US-09-356-952-12

Query Match      13.9%; Score 38; DB 3; Length 43676;
Best Local Similarity 59.1%; Pred. No. 0.15;
Matches 65; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

QY      65  caccctctcgttaagtctctaagaggaaattgttgatacgtagtagtatactgtatgtgta 124
          || || || || || || || || || || || || || || || || || || || ||
DB      14149  GAGCCATCTATATATAAAAAATAAGTATTTTGTGTATTAACAATAGATTTCTATATATATA 14090

QY      125  tgtatgtatgtatgtatatataagacactcttttactgtcaagtcacacctta 174
          || || || || || || || || || || || || || || || || || || || ||
DB      14089  TGTATATATATATATATATATATAAATTTAGATTACCAACAATATCATTTTA 14040

RESULT      6
US-08-571-758-3/C
: Sequence 3, Application US/08571758
: Patent No. 5700675
: GENERAL INFORMATION:
: APPLICANT: Rubin, Gerry M.
: APPLICANT: Therrien, Marc
: APPLICANT: Chang, Henry C.
: APPLICANT: Karim, Felix D.
: APPLICANT: Wasserman, David A.
: TITLE OF INVENTION: A No. 5700675el Protein Kinase Required for Ras
: TITLE OF INVENTION: Signal Transduction
: NUMBER OF SEQUENCES: 12
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: SCIENCE & TECHNOLOGY LAW GROUP
: STREET: 268 BUSH STREET, SUITE 3200
: CITY: SAN FRANCISCO
: STATE: CALIFORNIA
: COUNTRY: USA
: ZIP: 94104
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/571,758
: FILING DATE:
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: OSMAN, RICHARD A.
: REGISTRATION NUMBER: 36,627
: REFERENCE/DOCKET NUMBER: B96-010
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